

AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph beginning at page 20 line 8 with the following amended paragraph:

FIGS. 2 and 3 demonstrate that LuxR and LasR are found on the outer surface of the cell ~~cytoplasmic~~ outer membrane, as anti-LuxR and anti-LasR respectively are able to bind to the bacteria. The FITC labelled cells are shown as glowing spots against the dark background. In FIG. 2, there appear to be more labelled cells before the population is quorate (pre-glowing). It is postulated that LuxR and its homologues are only present on the cell membrane before quorum is reached. As quorum is reached, signalling molecules bind to LuxR and its homologues and the resultant complexes are internalised. Therefore there are few molecules of LuxR on the membrane of quorate cells, so antibody cannot bind.

Please replace the paragraph beginning at page 26, line 24 with the following amended paragraph:

1 ml aliquots of the culture samples, grown in luminescence media consisting of 5% yeast extract, 5% tryptone peptone, 1% CaCO₃ and 3% glycerol in filtered seawater, were placed into cylindrical, flat-bottomed cuvettes. No washing of the cells was required and light output was measured using a BioOrbit 1253 luminometer connected to a computer running the ~~Lumicom~~TM LUMICOM data processing software. Light output was measured on a linear arbitrary scale, assuming zero to be complete darkness. Each reading was performed in triplicate and averaged.